

For hollow core and few-mode fibers

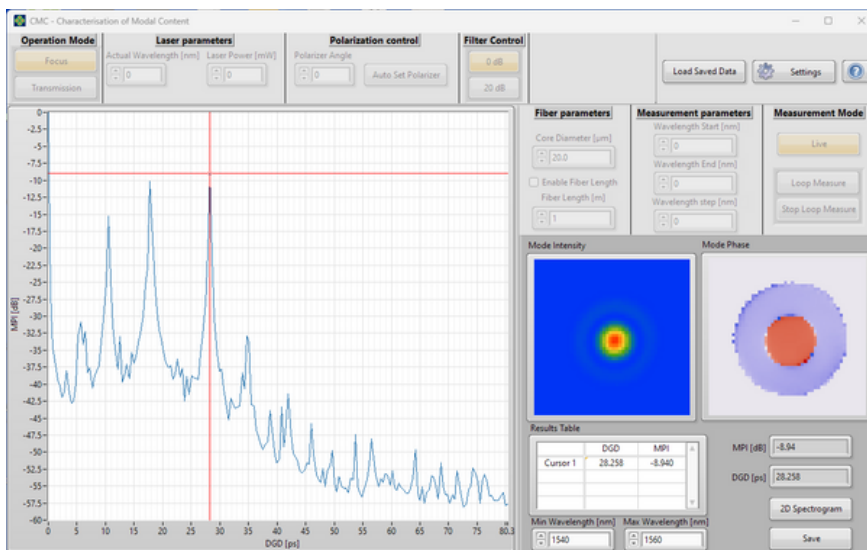
CMC-1550少模分析仪是为测量光纤结构复杂的少模光纤和空心光纤的各模态特性而设计的。

它由两个不同的单元-发射单元和接收单元组成，采用空间和光谱分辨成像(S2)技术来识别和表征光纤的单个模式，估计其模式相关的传播损耗，并评估其模式耦合效应。

CMC-1550 获得每种传播模式的差分群延迟 (DGD) 以及与最激发模式相比的相对强度 (或多径干扰 (MPI))。它提供了对光纤内各个模式特性及其相互作用的全面了解，有助于重建被测光纤的传播模式轮廓和导模相位。

### 特点与优势

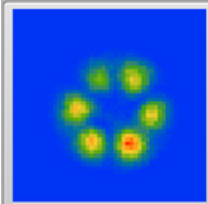
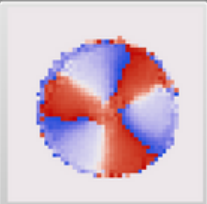
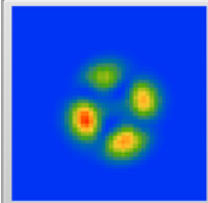
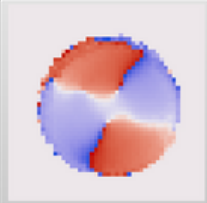
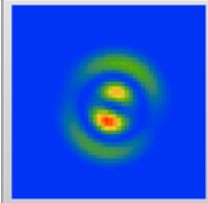

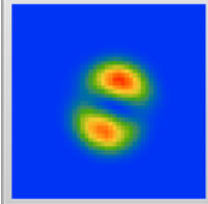

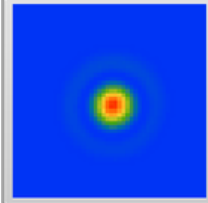
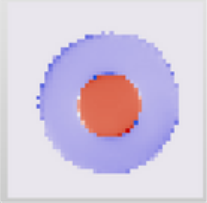
- 测量直径最大 400  $\mu\text{m}$  的空心光纤和少模光纤
- 重建传播模式轮廓和相位
- 计算高阶模式与最激发模式相比的相对强度
- 计算传播模式的DGD
- 循环测量模式可实现实时测量



CMC 软件用户界面

### 模式形态示例

两种颜色表示电场值的不同符号。

模式形态	模式强度	模式相位
LP31		
LP21		
LP12		
LP11		
LP02		



# CMC-1550

## 少模分析仪

### 技术规格

#### Measurement Capabilities

Fiber Diameter	< 400 $\mu\text{m}$
Fiber Length	5 to 100 m
Measurement Time*	< 28 sec (100 nm range, 0.05 nm spacing)
Fiber Type	Few-mode fibers, hollow core fibers
Input connector	Standard: Universal 2.5mm ferrule adapter, Bare fiber adapter Optional: LC, FC, ST, SC, MTP

#### Optical

Measurement Wavelength	1,480 to 1,640 nm
Max DGD resolution	< 1,800 ps
Min DGD resolution	0.05 ps
Image sensor	512 x 512 pixels, 20 $\mu\text{m}$ pixel pitch
Exposure range	0.1 ms to 20 ms exposure time

#### Physical

Weight	7 kg (Launch unit) 6 kg (Receiver unit)
Size	0.45 m x 0.16 m x 0.13 m (Launch unit) 0.39 m x 0.22 m x 0.13 m (Receiver unit)
Operating Temperature	15 - 30°C
Computer Requirements	All systems are supplied with a computer running up-to-date Windows operating system
Data Interface	1 X USB 3.0 (USB A to USB B: 1m cable supplied)



# CMC-1550

## 少模分析仪

### 订单信息

Part Number	Description
<b>CMC-1550</b>	S2 measurement system for the characterisation of modal content in optical fibers up to 400 $\mu\text{m}$ in diameter. Measurement range from 1480 to 1620 nm. Including optical receiver module, Santec tunable laser launch module, FC/APC patch cord kit, bare fiber adapter, rigid carrying case, cables, software package, APL-DC desktop computer, keyboard and mouse.
<b>CMC-SMPC</b>	FC/APC patch cord including bulkhead adapter
<b>CMC-BFA127</b>	Bare Fiber Adapter, 127 $\mu\text{m}$ inner diameter, FC style
<b>CMC-CC</b>	CMC rigid carrying case
<b>MPX-CALC</b>	Input connector adaptor for LC connectors (CMC/MPX compatible)
<b>MPX-CAFC</b>	Input connector adaptor for FC connectors (CMC/MPX compatible)
<b>MPX-CASC</b>	Input connector adaptor for SC connectors (CMC/MPX compatible)
<b>MPX-CAST</b>	Input connector adaptor for ST connectors (CMC/MPX compatible)
<b>MPX-CAMTP</b>	Input connector adaptor for MTP connectors (CMC/MPX compatible)
<b>CMC-1550EW3</b>	CMC-1550 Modal Content Analyser extended warranty covering parts and labour for 3 years from purchase, return to base. Cover excludes camera and the laser unit.
<b>CMC-1550EW5</b>	CMC-1550 Modal Content Analyser extended warranty covering parts and labour for 5 years from purchase, return to base. Cover excludes camera and the laser unit.